

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claim 1 (Previously Presented): An image-forming apparatus, comprising:

a fixing unit,

the fixing unit including:

a heating part including a heating element;

a power storage unit configured to supply power to the heating part so that the heating element of the heating part generates heat, the power storage unit including a chargeable and dischargeable secondary power supply unit; and

a controller configured to control an operation of the power storage unit,

wherein, when image-forming operation of the image-forming apparatus is suspended by an abnormality, the controller performs control such that the secondary power supply unit is charged when a remaining amount of stored energy thereof is lower than a predetermined voltage and is prevented from being charged when the remaining amount of stored energy is higher than or equal to the predetermined voltage.

Claim 2 (Previously Presented): The image-forming apparatus as claimed in claim 1, wherein the controller performs the control such that the secondary power supply unit is charged in accordance with the remaining amount of stored energy thereof when a state of the suspended image-forming operation allows returning to the image-forming operation.

Claim 3 (Previously Presented): The image-forming apparatus as claimed in claim 1, wherein the controller performs the control such that the secondary power supply unit is

charged until a voltage of the secondary power supply unit is higher than or equal to the predetermined voltage.

Claim 4 (Previously Presented): An image-forming apparatus, comprising:

a fixing unit,

the fixing unit including:

a heating part including a heating element;

a power storage unit configured to supply power to the heating part so that the heating element of the heating part generates heat, the power storage unit including a chargeable and dischargeable secondary power supply unit; and

a controller configured to control an operation of the power storage unit,

wherein, when image-forming operation of the image-forming apparatus is stopped, the controller performs control such that the secondary power supply unit is charged when a remaining amount of stored energy thereof is lower than a predetermined voltage and is prevented from being charged when the remaining amount of stored energy is higher than or equal to the predetermined voltage.

Claim 5 (Previously Presented): The image-forming apparatus as claimed in claim 4, wherein the controller performs the control such that the secondary power supply unit is charged in accordance with the remaining amount of stored energy thereof when a state of the stopped image-forming operation allows returning to the image-forming operation.

Claim 6 (Previously Presented): The image-forming apparatus as claimed in claim 4, wherein the controller performs the control such that the secondary power supply unit is

charged until a voltage of the secondary power supply unit is higher than or equal to the predetermined voltage.

Claim 7 (Previously Presented): An image-forming apparatus, comprising:
a fixing unit,
the fixing unit including:
a heating part including a heating element;
a power storage unit configured to supply power to the heating part so that the heating element of the heating part generates heat, the power storage unit including a chargeable and dischargeable secondary power supply unit; and
control means for controlling an operation of the power storage unit,
wherein, when image-forming operation of the image-forming apparatus is suspended by an abnormality, the control means performs control such that the secondary power supply unit is charged when a remaining amount of stored energy thereof is lower than a predetermined voltage and is prevented from being charged when the remaining amount of stored energy is higher than or equal to the predetermined voltage.

Claim 8 (Previously Presented): An image-forming apparatus, comprising:
a fixing unit,
the fixing unit including:
a heating part including a heating element;
a power storage unit configured to supply power to the heating part so that the heating element of the heating part generates heat, the power storage unit including a chargeable and dischargeable secondary power supply unit; and
control means for controlling an operation of the power storage unit,

wherein, when image-forming operation of the image-forming apparatus is stopped, the control means performs control such that the secondary power supply unit is charged when a remaining amount of stored energy thereof is lower than a predetermined voltage and is prevented from being charged when the remaining amount of stored energy is higher than or equal to the predetermined voltage.

Claim 9 (Previously Presented): An image-forming apparatus according to Claim 1, wherein said secondary power supply unit has a capacitance of more than 80F.

Claim 10 (Previously Presented): An image forming apparatus according to Claim 1, wherein said secondary power supply unit has a capacitance of more than 2000F.

Claim 11 (Previously Presented): An image forming apparatus according to Claim 1, wherein said secondary power supply unit is an electric double layer capacitor.

Claim 12 (Previously Presented): An image forming apparatus according to Claim 1, further comprising:

a switch; and

a power supply unit;

wherein the heating part further comprises an additional heating element and the additional heating element is fed with power from the power supply unit through said switch.

Claim 13 (Previously Presented): An image forming apparatus according to Claim 12, further comprising:

a charger;

wherein the charger is fed with power from the power supply unit and is configured to charge the power storage unit.

Claim 14 (Previously Presented): An image forming apparatus according to Claim 1, wherein said abnormality of the image forming apparatus is a paper jam.

Claim 15 (Currently Amended): An image forming apparatus according to Claim 4, wherein said remaining amount of stored energy is determined based on a voltage of ~~by a voltage sensor coupled to~~ said secondary power supply unit.

Claim 16 (Previously Presented): The image-forming apparatus as claimed in Claim 1, wherein the secondary power supply unit comprises a capacitor.

Claim 17 (Previously Presented): The image-forming apparatus as claimed in Claim 4, wherein the secondary power supply unit comprises a capacitor.

Claim 18 (Previously Presented): The image-forming apparatus as claimed in Claim 7, wherein the secondary power supply comprises a capacitor.

Claim 19 (Previously Presented): The image-forming apparatus as claimed in Claim 8, wherein the secondary power supply unit comprises a capacitor.

Claim 20 (Previously Presented): The image-forming apparatus as claimed in Claim 1, wherein the charging of the secondary power supply unit is stopped when the remaining amount of stored energy thereof is higher than or equal to the predetermined voltage.

Claim 21 (Previously Presented): The image-forming apparatus as claimed in Claim 4, wherein the charging of the secondary power supply unit is stopped when the remaining amount of stored energy thereof is higher than or equal to the predetermined voltage.

Claim 22 (Previously Presented): The image-forming apparatus as claimed in Claim 7, wherein the charging of the secondary power supply unit is stopped when the remaining amount of stored energy thereof is higher than or equal to the predetermined voltage.

Claim 23 (Previously Presented): The image-forming apparatus as claimed in Claim 8, wherein the charging of the secondary power supply unit is stopped when the remaining amount of stored energy thereof is higher than or equal to the predetermined voltage.

Claim 24 (Previously Presented): An image-forming apparatus, comprising:
a fixing unit,
the fixing unit including:
 a heating part including a heating element;
 a power storage unit configured to supply power to the heating part so that the heating element of the heating part generates heat, the power storage unit including a chargeable and dischargeable secondary power supply unit; and
 a controller configured to control an operation of the power storage unit;
wherein, when image-forming operation of the image-forming apparatus is suspended by an abnormality, the controller performs control such that the secondary power supply unit is charged in accordance with a remaining amount of stored energy thereof; and

when the image-forming operation of the image-forming apparatus is being performed, the controller performs control such that the secondary power supply unit is charged if the remaining amount of stored energy of the secondary power supply unit is lower than a predetermined voltage and a charge current larger than a predetermined value is securable.

Claim 25 (Previously Presented): An image-forming apparatus, comprising:

a fixing unit,

the fixing unit including:

a heating part including a heating element;

a power storage unit configured to supply power to the heating part so that the heating element of the heating part generates heat, the power storage unit including a chargeable and dischargeable secondary power supply unit; and

a controller configured to control an operation of the power storage unit;

wherein, when image-forming operation of the image-forming apparatus is stopped, the controller performs control such that the secondary power supply unit is charged in accordance with a remaining amount of stored energy thereof; and

when the image-forming operation of the image-forming apparatus is being performed, the controller performs control such that the secondary power supply unit is charged if the remaining amount of stored energy of the secondary power supply unit is lower than a predetermined voltage and a charge current larger than a predetermined value is securable.

Claim 26 (Previously Presented): An image-forming apparatus, comprising:

a fixing unit,

the fixing unit including:

a heating part including a heating element;

a power storage unit configured to supply power to the heating part so that the heating element of the heating part generates heat, the power storage unit including a chargeable and dischargeable secondary power supply unit; and

control means for controlling an operation of the power storage unit;

wherein, when image-forming operation of the image-forming apparatus is suspended by an abnormality, the control means performs control such that the secondary power supply unit is charged in accordance with a remaining amount of stored energy thereof; and

when the image-forming operation of the image-forming apparatus is being performed, the controller performs control such that the secondary power supply unit is charged if the remaining amount of stored energy of the secondary power supply unit is lower than a predetermined voltage and a charge current larger than a predetermined value is securable.

Claim 27 (Previously Presented): An image-forming apparatus, comprising:

a fixing unit,

the fixing unit including:

a heating part including a heating element;

a power storage unit configured to supply power to the heating part so that the heating element of the heating part generates heat, the power storage unit including a chargeable and dischargeable secondary power supply unit; and

control means for controlling an operation of the power storage unit;

wherein, when image-forming operation of the image-forming apparatus is stopped, the control means performs control such that the secondary power supply unit is charged in accordance with a remaining amount of stored energy thereof; and

when the image-forming operation of the image-forming apparatus is being performed, the controller performs control such that the secondary power supply unit is charged if the remaining amount of stored energy of the secondary power supply unit is lower than a predetermined voltage and a charge current larger than a predetermined value is securable.